



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,908	10/02/2006	Kenric B. Rose	8411.1120	4740
57656 7590 12/09/2010 BERENATO, WHITE & STAVISH 6550 ROCK SPRING DRIVE SUITE 240 BETHESDA, MD 20817				
EXAMINER				
DUONG, THO V				
ART UNIT		PAPER NUMBER		
3744				
MAIL DATE		DELIVERY MODE		
12/09/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/572,908

Applicant(s)

ROSE, KENRIC B.

Examiner

Tho v. Duong

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-5, 8-10, 13, 15 and 25-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 8-10, 13, 15 and 25-33 is/are rejected.
- 7) ☒ Claim(s) 34-35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/29/10
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's amendment filed 7/12/10 is acknowledged. Claims 1,3-5,8-10,13,15 and 25-35 are pending.

Response to Arguments

Applicant's arguments with respect to claims 1,3-5,8-10,13,15 and 25-33 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 30-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 30 and 31 recite the limitation "said at least one internal tube" in 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3-5,8,13,15,25 are rejected under 35 U.S.C. 102(b) as being anticipated by R. H. Carter (US 2,847,193). Carter discloses (figures 1-3) a pressure vessel assembly comprising an enclosed outer casing (4-6); at least one internal tube (3) extending within the outer casing; at least one hydraulic fluid accumulator of any type (1,2) disposed within the at least one internal tube with a clearance; at least one cooling passage provided adjacent to the hydraulic fluid accumulator for receiving a flow of a cooling fluid there through for cooling the at least one hydraulic fluid accumulator; the at least one cooling passage formed within the internal tube and defined by the clearance between the internal tube and the accumulator (1,2); a spiral (8) wrapping between the internal tube and the accumulator; the outer casing includes a substantially tubular housing (4) and end members (5,6) at opposite distal end of the housing; wherein the internal tube extend between and through the end members; the pressure vessel assembly defines a compartment therewithin between the outer casing and the internal tube; the compartment at least partially filled with a hydraulic working fluid.

Claims 1,3-5, 10, 15 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by D. Dalin (US 2,822,136). Dalin discloses (figures 1-5 and column 3, lines 57-75) a pressure vessel assembly comprising an enclosed outer casing (20); at least one internal tube (21 or 16) extending within the outer casing; at least one hydraulic fluid accumulator of any type (9) disposed within the at least one internal tube with a clearance; at least one cooling passage (18) provided adjacent to the hydraulic fluid accumulator for receiving a flow of a cooling fluid there through for cooling the at least one hydraulic fluid accumulator; the at least one cooling passage formed within the internal tube and defined by the clearance between the internal tube and the accumulator (9); the outer casing includes a substantially tubular housing (20) and end members

(top and bottom) at opposite distal end of the housing; wherein the internal tube extend between and through the end members; a fan (28) is provided to force air through the cooling passage.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over H. Carter (US 2,847,193) in view of Rains (US 5,127,441). Carter substantially discloses all of applicant's claimed invention as discussed above except for the limitation that the spiral wrapping is made of an elastomeric material. Rains discloses (column 3, lines 9-15) a coaxial piping system that has a spiral wrapping (12) is made of metal or resilient material for a purpose of providing an alternative material for the spiral wrapping that is suitable for whatever liquid or gas are transported through the system. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Rains' teaching in Carter's device for a purpose of providing an alternative material for the spiral wrapping that is suitable for whatever liquid or gas are transported through the system.

Claims 8- 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalin (US 2,822, 136) in view of Rains (US 5,127,441). Dalin substantially discloses all of applicant's claimed invention as discussed above except for the limitation that a spiral wrapping is made of

an elastomeric material, located between the inner tube and the accumulator. Rains discloses (column 3, lines 9-15) a coaxial piping system that has a spiral elastomeric wrapping (12) located within the coaxial passage for a purpose of increasing the length of the concentric flow path, which in turn to enhance the heat exchanging performance of the device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Rains' teaching in Dalin's device for a purpose of increasing the length of the concentric flow path, which in turn to enhance the heat exchanging performance of the device.

Claims 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michel (US 4,520,840) in view of Carlson (US 4,380,150). Michel discloses (figures 1-3 and column 1, lines 55-60) a pressure vessel assembly comprising an enclosed outer casing (7); at least one hydraulic fluid accumulator (1) disposed within the outer casing; a compartment, which pressure is maintain at a low pressure or at atmospheric, is located within the pressure vessel assembly between the outer casing and the at least one hydraulic fluid accumulator; the compartment being fluid communication with the at least one hydraulic fluid accumulator so as to selectively transfer the hydraulic working fluid between the compartment and the at least one hydraulic fluid accumulator; and a pressurized gas reservoir (atmosphere or feed pump) external to the outer casing; the pressure gas reservoir being in fluid communication with the compartment (16) within the casing, which is capable for pressuring the hydraulic working fluid (when the hydraulic working fluid pressure is lower than the atmosphere) within the compartment in the outer casing; the outer casing includes a substantially tubular housing and end members (8,9) secured at opposite distal end of the housing; the accumulator include an internal tube extending between the end members (8,9); the end members (8,9) are also considered to read as the internal

baffles; a hydraulic machine (25) having a first port fluidly connected to at least one hydraulic fluid accumulator and a second port fluidly connected to the working fluid in the compartment (figure 3 show the connection between machine 25 and the high and the low pressure fluid). Michel does not disclose that the working fluid of the system is hydraulic oil. Carlson discloses (figure 1) a hydraulic system that use hydraulic oil, which fills the accumulator (43) and the reservoir (27) for a purpose of providing a hydraulic machine. Carlson also discloses it is known in the art to use a gas tank (49) as a pressurized gas reservoir to provide a pressure source to any container that is in need for pressure. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Carlson's teaching in Michel's device for a purpose of providing a hydraulic machine and providing a pressure source to the pressured reservoir.

Allowable Subject Matter

Claims 34-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v. Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tyler J. Cheryl can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tho v Duong/
Primary Examiner, Art Unit 3744

Application/Control Number: 10/572,908
Art Unit: 3744

Page 8